**OXYMORPHONE**

1.0 Introduction

WADA wishes to draw the attention of the Laboratories to the possible detection of the Prohibited Substance Oxymorphone in urine Samples due to the decomposition of the permitted drug Methylnaltrexone (MTNX), a peripherally acting μ-opioid antagonist that reverses some of the side effects of opioid drugs without affecting analgesia.

Oxymorphone may be formed in situ as a degradation artifact of MTNX after thermolysis in the Gas Chromatograph (GC) inlet or as a side reaction of the per-TMS (trimethylsilyl) derivatization under GC-Mass Spectrometry (GC-MS) analysis conditions [1]. The procedures based on the detection of oxymorphone and its Metabolites by Liquid Chromatograph-Mass Spectrometry (LC-MS) are not affected, as MTNX degradation is not observed under electrospray conditions.

2.0 Reporting Requirements

Therefore, whenever a Laboratory confirms oxymorphone in a urine Sample by GC-MS, prior to reporting the result as an Adverse Analytical Finding (AAF), the Laboratory shall evaluate whether the finding is the result of the permitted administration of MTNX.

- Confirm the absence of MTNX by analyzing the Sample by LC-MS;

  [Comment: The Laboratory may also consider testing for the presence of Noroxymorphone (a minor but expected Metabolite of oxymorphone) during the Confirmation Procedure (CP).]

- Report the result as an AAF for oxymorphone when MTNX is not detected in the Sample after being analyzed by LC-MS;

- Report the result as a Negative Finding if MTNX is present in the Sample, and an alternative CP by LC-MS analysis for oxymorphone cannot be performed.

3.0 References